



Certificate no.:
TAE00004YV

TYPE APPROVAL CERTIFICATE

This is to certify:

that the explosion proof Cable Gland

with type designation(s)

blueglobe, blueglobe TRI, blueglobe AC, blueglobe HT, blueglobe HT TRI, blueglobe HT AC

issued to

PFLITSCH GmbH & Co. KG

Hückeswagen, Nordrhein-Westfalen, Germany

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Material	Metallic
Suitable for open deck	Yes
Suitable for Hazardous areas	Yes

Issued at **Hamburg** on **2024-10-16**

This Certificate is valid until **2029-10-15**.

for **DNV**

DNV local unit: **Essen**

Approval Engineer: **Carsten Hunsalz**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

Type designation:	blueglobe, blueglobe TRI, blueglobe AC
Gland material:	Brass, nickel plated brass or stainless steel
Seal material:	TPE, O-Ring HNBR or Silicone
Accessories:	Lock nuts, sealing plugs, assembly group for armoured cables (AC) and EMC spring for cables with a shield (TRI)
Operating temperature range:	- 20 to +60°C
Degree of protection:	IP66, IP68 (15 bar 1h)
Cable type:	Braided / Armoured or Unbraided / Unarmoured (no connection for braid/armour)
Gland sizes range:	Metric thread size: 10, 12, 16, 20, 25, 32, 40, 50, 63, 75, 85 Metric thread size: 20, 25, 32, 40, 50, 63, 75, 85 (blueglobe AC)
Ex classification:	II 2G Ex eb IIC Gb / II 2D Ex tb IIIC Db
Ex certificate number:	PTB 06 ATEX 1036 X Issue:1 and PTB Ex 22-11189

Type designation:	Blueglobe HT, blueglobe HT TRI, blueglobe HT AC
Gland material:	Brass, nickel plated brass or stainless steel
Seal material:	Silicone, O-Ring Silicone
Accessories:	Sealing plugs, assembly group for armoured cables (AC) and EMC spring for cables with a shield (TRI)
Operating temperature range:	- 55 to +160°C (Sealing elements: Silicone) - 55 to +90°C (in conjunction with bolts BOBg...)
Degree of protection:	IP66, IP68 (15 bar 1h)
Cable type:	Braided / Armoured or Unbraided / Unarmoured (no connection for braid/armour)
Gland sizes range:	Metric thread size: 12, 16, 20, 25, 32, 40 Metric thread size: 20, 25, 32, 40 (blueglobe HT AC)
Ex classification:	II 2G Ex eb IIC Gb / II 2D Ex tb IIIC Db
Ex certificate number:	PTB 11 ATEX 1007 X Issue:1 and PTB Ex 20-10025

Application/Limitation

Manufacturer's installation description, instructions and DNV rules to be followed.

Not to be used in bulkheads/decks or for penetrating boundaries of tanks.

Suitable for open deck.

The information related to Ex certification from recognised test institution is given as information only. Applications where Ex certified equipment is required will in general be subject to approval case by case based on documentation as required in DNV Rules

Only permanently wired cables may be entered. The user shall provide clamping of the cable to ensure that pulling is not transmitted to the terminations.

Types suitable for a "low" risk of mechanical danger shall be mounted in such a way that they are mechanically protected against impact force.

Degree of protection will be safeguarded only when sealing and cable entry fittings are properly fitted. The manufacturer's instructions must be followed.

Type Approval documentation

Tests carried out

Type tests in accordance with IEC/EN 60079-0:2017/2018, IEC/EN 60079-7:2017/2018, IEC/EN 60079-31:2013/2014, IEC/EN 60529:2013/2014

Marking of product

Name of manufacturer – type designation – Ex rating.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE